## Docket No.: 0171-1277PUS1

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) 3,4-bis(1-sulfoxyalkyl)thiophene represented by formula [1] below:

$$\begin{array}{c} \text{CH}_2(\text{CH}_2)_n\text{CH}_2\text{OSO}_3\text{R} \\ \\ \text{CH}_2(\text{CH}_2)_n\text{CH}_2\text{OSO}_3\text{R} \end{array} \hspace{2cm} \begin{array}{c} \text{[1]} \end{array}$$

(——where R denotes a hydrogen atom, alkali metal atom, or alkaline earth metal atom, and n denotes an integer of 1 to 3.)-3.

- 2. (Cancelled)
- 3. (Original) 3,4-bis(1-sulfoxypropyl-3-yl)thiophene represented by formula [3] below:

(——where R denotes a hydrogen atom, alkali metal atom, or alkaline earth metal atom.) atom.

- 4. (Cancelled)
- 5. (Currently Amended) Sulfoxyalkylthiophene <u>as</u> defined in claim 1 <del>above</del> wherein the alkali metal atom is sodium or potassium.

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6. (Currently Amended) A process which comprises steps of reacting 3,4-bis(1-hydroxyalkyl)thiophene represented by formula [2] below:

—where n denotes an integer of 1 to  $\frac{3}{2}$ ;

with a sulfur trioxide compound to give 3,4-bis(1-sulfoxyalkyl)thiophene represented by formula [5] below:

(——where n is defined as above);

and reacting it with an alkali metal compound or alkaline earth metal compound to give a metal salt of 3,4-bis(1-sulfoxyalkyl)thiophene represented by formula [6] below:

$$CH_2(CH_2)_nCH_2OSO_3M$$
 $CH_2(CH_2)_nCH_2OSO_3M$ 

[6]

(——where M denotes alkali metal atom or alkaline earth metal atom and n is defined as above.).

## 7. (Cancelled)

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8. (Previously Presented) The process for producing a metal salt of sulfoxyalkylthiophene

as defined in claim 6, wherein the alkali metal atom is sodium or potassium.

9. (Previously Presented) The process for producing a metal salt of sulfoxyalkylthiophene

as defined in claim 6, wherein the sulfur trioxide compound is sulfur trioxide, sulfur trioxide 1,4-

dioxane complex, sulfur trioxide DMF (N,N-dimethylformamide) complex, or sulfur

trioxide pyridine complex.

10. (Currently Amended) Sulfoxyalkylthiophene as defined in claim 3 above wherein the

alkali metal atom is sodium or potassium.